

Remarks/Arguments:

Claims 1-8 are pending and rejected in the application. Claims 3 and 7 have been amended. No new matter has been added.

On page 2, the Official Action rejects claims 7-8 under 35 U.S.C. §112, second paragraph as being indefinite. Specifically, the Examiner states that the limitation of "*the first initialization period*" in claim 7 does not have sufficient antecedent basis. Thus, Applicants have amended claim 7 to delete "*the first initialization period.*" Withdrawal of the rejection is respectfully requested.

On page 3, the Official Action rejects claims 1-2 and 4-5 under 35 U.S.C. §103(a) as being unpatentable over Nakamura (U.S. 2002/0021264) in view of Homma (U.S. 2001/0020923). It is respectfully submitted, however, that the claims are patentable over the art of record for at least the reasons set forth below.

Applicants' invention, as recited by claim 1, includes features which are neither disclosed nor suggested by the art of record, namely:

... the abnormal charge erasing part applying a positive rectangular waveform voltage, followed by applying a negative rectangular waveform voltage, to the scan electrodes.

Claim 1 relates to the application of a bipolar rectangular waveform which alternates between positive and negative polarity in order to control abnormal charge. Specifically, the bipolar rectangular waveform is applied to the scan electrodes during an abnormal charge erasing part of the initialization period. This feature is found in the originally filed application on pages 9 and 10 and furthermore in Fig. 4. No new matter has been added.

On page 4, the Official Action rejects claim 1 based on paragraphs 11-20 and 61-73 and Figs. 8-10 of Homma. Specifically, the Examiner is interpreting Homma's positive pulse Ppr-s and negative pulse Ppe-s as Applicants' positive and negative rectangular waveforms. Applicants', however, respectfully disagree with the Examiner's interpretation of Homma. It is shown in at least Fig. 9 of Homma that the pulse Ppr-s and Ppe-s are both positive and negative sawtooth waveforms (they are

not rectangular). This waveform is supported in Homma's paragraph 15 ("*during the priming period, a **sawtooth** prime pulse Ppr-s is applied to the scan electrodes*"). Furthermore, the bipolar pulses Ppr-s and Ppe-s are applied to the scan electrodes in the priming period which corresponds with the positive and negative sawtooth waveforms applied to the scan electrodes in the former half part and the latter half part of Applicants' initialization period (please see Fig. 4). Thus, Ppr-s and Ppe-s as shown in Fig. 9 of Homma are sawtooth waveforms (not rectangular waveforms) and are applied during a priming period (not during an abnormal charge erasing period).

Applicants' claim 1 is different then the art of record because of a positive rectangular waveform and a negative rectangular waveform that are applied to the scan electrodes during an abnormal charge erasing period ("*the abnormal charge erasing part applying a positive rectangular waveform voltage, followed by applying a negative rectangular waveform voltage, to the scan electrodes*"). Shown in at least Applicants' Fig. 4, during the abnormal charge erasing part of the initializing period, a positive rectangular waveform is pulsed to a positive voltage V_m and then a negative rectangular waveform is pulsed to the value V_a . This feature is at least supported on page 10, lines 5-15 of Applicants' specification ("*after a positive voltage V_m smaller than a discharge-starting voltage is applied for 5 to 20 μs , negative voltage V_a is applied for a short period up to 3 μs* ").

Neither Nakamura, Kim, Homma nor their combination suggests an abnormal charge erasing part were a positive rectangular waveform is applied to the scan electrode followed by a negative rectangular waveform. Thus, the combinations of these references are deficient. Accordingly, for the reasons set forth above, claim 1 is patentable over the art of record.

On page 5, the Official Action rejects claims 3 and 6-8 under 35 U.S.C. §103(a) as being unpatentable over Nakamura in view of Kim (U.S. Patent 7,109,951). Specifically, Fig. 8 of Kim shows that positive rectangular waveforms are applied in a wall charge control period. Kim, however, does not suggest a positive rectangular waveform followed by a negative rectangular waveform (Kims' rectangular waveforms are only positive). Thus, the combination of Nakamura and Kim is deficient. Independent claims 3 and 7 have been amended and now include features similar to

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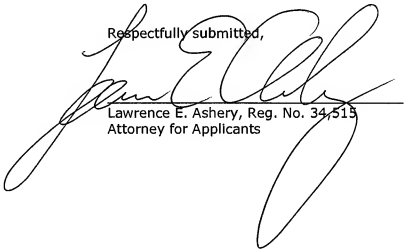
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claim 1. Thus, claims 3 and 7 are also patentable over the art of record for at least the reasons set forth above.

Dependent claims 2, 4-6 and 8 include all of the features of the claims from which they depend. Thus, these claims are also patentable over the art of record for at least the reasons set forth.

In view of the amendments and arguments set forth above, the above identified application is in condition for allowance which action is respectfully requested.

Respectfully submitted,



Lawrence E. Ashery, Reg. No. 34,515
Attorney for Applicants

RAE/nm

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P.O. Box 980
Valley Forge, PA 19482
(610) 407-0700

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